Moving plates (2)

- Plates moving towards each other

There are 2 types of material forming the plates.
In some places the plates are thin and dense.
These are found under the oceans (basaltic crust).
Other plates are thicker and less dense.
These make up the continents (granitic crust).

In some places 2 plates are moving towards each other. Where they meet, the denser oceanic crust slips under the continental crust. This is called subduction.

The friction between the plates can cause earthquakes.
The rock can even get so hot that it melts and rises to the surface to form volcanoes.

Eventually, the whole oceanic part of the plate slips under the continental crust.
Then two areas of continental crust collide.
The crust folds upwards, forming mountains.
Metamorphic rocks can form under this great pressure.
The Himalayas and the Alps were formed like this.

Folds and faults

The great forces involved when plates move can cause layers of rock to snap. This forms a fault.
Sometimes the layers bend, forming a fold.
Layers can even be turned upside down!

Smashing plates!

Use coloured strips of modelling clay to show the layers of rock.
Move 2 blocks of wood together to show how the layers can fold.
Use a knife to cut the layers, then move them slightly to form a fault.
- Can you think of a reason why rocks sometimes form a fold and sometimes a fault?